from this he argues that they died in their natural position, and that when living they probably swam on their backs. He mentions, in support of his view, the well-known fact that very young *Limuli* and other Crustacea frequently swim in that position. I have for several summers kept young horseshoe crabs in my jars, and have noticed that, besides thus often swimming on their backs, they will remain in a similar position for hours, perfectly quiet, on the bottom of the jars where they are kept. When they cast their skin it invariably keeps the same attitude on the bottom of the jar. It is not an uncommon thing to find on beaches, where *Limulus* is common, hundreds of skins thrown up and left dry by the tide, the greater part of which are turned on their backs. An additional point to be brought forward to show that the Trilobites probably pass the greater part of their life on their back and die in that attitude, is that the young *Limuli* generally feed while turned on their back; moving at an angle with the bottom, the hind extremity raised, they throw out their feet beyond the anterior edge of the carapace, browsing, as it were, upon what they find in their road, and washing away what they do not need by means of a powerful current produced by their abdominal appendages.—*Silliman's Amer. Journ.*, Jan. 1878.

New Species of Ceratodus *from the Jurassic.* By O. C. Marsh.

Among the interesting vertebrate remains recently found in the Jurassic of Colorado is a tooth of a *Ceratodus* in good preservation. The specimen is a left lower dental plate, having the inner side convex, and the outer divided into five prominent projections, which are separated by four notches. The front projection is longest and most pointed. The plate is attached to a portion of the dentary bone.

The length of this dental plate is 20 millims., and the transverse diameter 11 millims. The species is the first Mesozoic *Ceratodus* found in this country, and hence of much interest. It may be named *Ceratodus Güntheri*, in honour of Dr. A. Günther of the British Museum. The geological horizon of this species is in the *Atlantosaurus* beds of the Upper Jurassic.—*Silliman's Amer. Journ.*, Jan. 1878.

Sexual Dimorphism in Butterflies.

Mr. S. H. Scudder, in an article on sexual dimorphism in butterflies (to which special kind of dimorphism he applies the term *antigeny*), states that it is not the male but the female that departs from the normal type of colouring of the group to which the species belongs, while it is the male that shows divergences from the type in structural characters. These structural divergences in butterflies appear in the wings and the legs, and sometimes in the antennæ. Mr. Scudder knows of no example in which the male alone diverges from the general plan of coloration belonging to the group.—*Proc. Amer. Acad.* 1877.